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**Mathematics Faculty**

**Year 10 Unit 6 Overview**

**Angles**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Angles** | I can identify congruent and similar shapes. |  |  |  |
| I can understand the angle properties of parallel lines. |  |  |  |
| I can solve angle problems and understand angle proofs in triangles. |  |  |  |
| I can calculate interior and exterior angles of polygons. |  |  |  |
| I can solve angle problems using equations. |  |  |  |
| I can solve geometrical problems showing reasoning. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Identifying congruent and similar shapes, including triangles of the form ASA etc. (CM 66,67,291,292) (MW 166) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc. Assessment is also supported with our use of ILOs that alternate between Basic Skills Checks one week and then a more individual ILO the following week through Maths Watch and Corbett Maths (see learning focus). Finally, every unit is assessed half termly as part of our Assessment Calendar in Mathematics. | Congruent, similar, polygon, 2D, 3D. |
| **2** | Understanding and using angle properties of parallel lines & find missing angles. (CM 25) (MW 120) | Alternate, co-interior, corresponding, (vertically) opposite, parallel. |
| **3** | Working with angles in triangles and understand angle proofs about triangles. (CM 37) | Triangle, isosceles, scalene, equilateral, proof. |
| **4** | Calculating exterior angles of polygons and understand the different methods. (CM 32) (MW 123) | Interior, exterior, polygon, side, regular, irregular. |
| **5** | Calculating interior angles of polygons and understand the different methods. (CM 32) (MW 123) | Interior, exterior, polygon, side, regular, irregular. |
| **6** | Working with angle problems that involve solving an equation. (CM 114) | Equivalent, equal, term, coefficient. |
| **7** | Solving geometric problems involving angles, including in real life contexts. (CM 25-39) (MW 45-46) | Geometric, proof, angle, interior, exterior, polygon, alternate, co-interior, (vertically) opposite, corresponding. |
| **8** | Solving geometric problems showing reasoning, including simple geometric proofs. (CM 25-39) (MW 45-46) | Geometric, proof, angle, interior, exterior, polygon, alternate, co-interior, (vertically) opposite, corresponding. |